

Energy Efficiency Highlights of the Energy Policy Act of 2005

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Overview

- Background
- Energy savings impacts
- Energy Efficiency Title
- Tax Title
- Implications for Energy Star Partners
- Summary

Background

- First elements of bill discussed in 1997
- First bill introduced 1999
- First omnibus bill passed 2001 (House)
- First bill conference 2002
- First conference report 2003
- Final bill enactment August 8, 2005

Background

- A sample of the gas and electricity provisions ***not*** covered in this presentation
 - PUHCA repeal
 - FERC eminent domain for transmission and LNG facilities
 - Electricity reliability standards
 - State requirements to consider improved interconnection standards for CHP and other DG
 - Tax depreciation benefits for transmission line and pipeline investments
 - Time-based pricing and metering

Energy Savings Impacts

- Final bill estimated to save 2.5 Quads in 2020—about 2% of total forecast consumption
 - Senate bill would have saved ~ 3.8%
 - Stronger bill would have saved ~ 8-10%
- Oil savings negligible—conferees cut Senate 1 MBD savings target
 - Senate bill would have saved ~ 4% of 2020 oil use
- Electricity savings 206TWH, ~4% of 2020 forecast
- Natural gas savings 1.4 TCF, ~5% of 2020 forecast

Efficiency Title

- EE provisions covered in this presentation
 - Federal energy management
 - Appliance/equipment standards
 - The Energy Star program
 - Efficiency resource standards—study and pilot program
 - State-based appliance rebate programs
 - Efficient public buildings grants program
 - Public information campaign

Efficiency Title

- Federal Energy Management
 - Sets new savings target for federal buildings—20% below 2003 baseline by 2015
 - Sets 2012 target for individual metering of all fed buildings—should record hourly use and report data daily; guidelines due in 6 months
 - Creates new agency procurement guidelines linked to Energy Star criteria
 - Reauthorizes Energy Savings Performance Contracting program for 10 years

Efficiency Title

- Appliance standards—16 new products
 - Exit signs
 - Traffic signals
 - Pedestrian signals
 - Dry-type transformers
 - Torchiere lights
 - CFLs
 - Commercial unit heaters
 - Residential dehumidifiers
 - Commercial refrigerators & freezers
 - Large commercial AC
 - Commercial icemakers
 - Commercial clothes washers
 - Mercury vapor lamp ballasts
 - Fluorescent lamp ballasts
 - Pre-rinse spray valves
 - Residential ceiling fan light fixtures
- Three products designated for DOE rulemakings:
external power supplies, battery chargers, and
vending machines for refrigerated beverages

Efficiency Title

- ENERGY STAR Program guidelines
 - Formally authorizes the program at EPA and DOE
 - Sets new criteria development guidelines, including a 270-day notice period
 - Sets dates for new clothes washer and dishwasher criteria, to be effective in January 2007 and 2010.

Efficiency Title

- Efficiency Resource Standards
 - Calls for a DOE study and a pilot program to encourage states to develop these policies
 - Based on policies in place in Texas, Illinois, Connecticut, California, Nevada, Hawaii, and Pennsylvania
 - Conferees dropped a Senate provision that would have required all states to consider EERS

Efficiency Title

- Appliance Rebate Programs
 - Authorizes a federal grant program for states that operate consumer efficient appliance rebate programs
 - \$50 M/yr authorized for 2006-2010
 - Subject to appropriations

Efficiency Title

- Efficient public buildings grants program
 - Authorizes federal grants to states for programs that encourage public buildings to exceed the IECC code (or the existing building performance) by 30%
 - Authorizes \$30 M/yr for 2006-2010
 - Subject to appropriations

Efficiency Title

- Public Awareness Campaign
 - Authorizes \$90 M/yr for 2006 through 2010 for a broad national effort to encourage energy efficiency and conservation
 - Encourages cooperative efforts with state and local governments and the private sector
 - Subject to appropriations

Tax Title

- Overview
 - Conference report cut about half the value of the Senate tax title
 - Years of eligibility cut from 3-4 years to two
 - Some credits were cut—notably CHP, new homes 30% better than code, commercial deduction amount

Tax Title

- EE technologies covered:
 - Commercial buildings
 - New homes
 - Existing homes (multiple technologies)
 - High-efficiency appliances
 - High-efficiency vehicles

Tax Title

- Commercial buildings
 - Provides \$1.80/SF deduction for buildings exceeding ASHRAE 90.1-2001 by 50%
 - New and existing buildings covered
 - Prorated deduction available for HVAC, envelope and lighting systems (\$.60/SF each)
 - Further proration available for lighting systems, beginning at 25% better than ASHRAE standards, e.g. \$.30/SF
 - DOE helping Treasury develop qualification rules

Tax Title

- New homes
 - \$2000 credit provided for builders of homes that exceed IECC criteria by 50%
 - \$1000 credit provided to manufactured home producers meeting Energy Star criteria
 - \$1000 credit for builders of homes 30% better than IECC was eliminated in conference
 - DOE helping Treasury develop qualification rules

Tax Title

- Existing homes—overall credit limit is 10% of cost up to a cap of \$500, for:
 - Insulation
 - Windows (capped at \$200)
 - CAC and heat pumps, 15 SEER and 13 EER, capped at \$300
 - Furnaces/boilers, AFUE 95, capped at \$150
 - Water heaters, EF .80, capped at \$150
 - Heat pump water heaters, EF 2.0, capped at \$300
 - Ground source heat pumps meeting efficiency specs, capped at \$300

Tax Title

- High-efficiency appliances
 - Credit provided to manufacturers of refrigerators, clothes washers, and dishwashers
 - Credits tied to tiered efficiency criteria, ranging from \$50 to \$175 per unit
 - Overall cap of \$75 million per manufacturer

Tax Title

- High-efficiency vehicles
 - Credits offered for hybrid or diesel vehicles, 2006-2009
 - Diesels must also meet emissions targets—none on market will do so until (probably) 2007
 - Amount based on a formula based on percentage mileage improvement over a base level, plus total fuel savings
 - ACEEE estimates highest credit will go to the Prius (\$3150)
 - Sets a per-manufacturer cap of 60,000 vehicles; thereafter credit phases out over 16 months
 - Toyota likely to hit its cap in first half of 2006

Implication for Energy Star Partners

- FEMP procurement will heighten focus on Energy Star products in federal agency purchasing
- EERS policies may create new state efficiency resource targets, which could create added Energy Star and other efficiency program activity
- New standards may cause some Energy Star criteria to adjust; in some cases, standards are based on Energy Star criteria
- New tax incentives only partly aligned with Energy Star criteria, e.g. manufactured homes, some appliances
- If new federal/state programs are funded, they could create new partner opportunities, e.g. appliance rebate programs, public buildings programs, public education

Summary

- The energy bill sets new standards and incentives, some of which will raise Energy Star criteria, and some of which will support increased penetration of current Energy Star products
- Overall impact is limited, especially with short time frame in tax title
- State and regional Energy Star efforts can leverage some of the bill's provisions

Thank You!

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